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Joseph P. Odenwalder

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
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EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,843

Applicant(s)

ODENWALDER, JOSEPH P.

Examiner

Toan D Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-57 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4,5,6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 8-14, 22-23, 31-32 and 40-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Li (US 6,141,353).

For claim 1, Li discloses subsequent frame variable data rate indication method for various variable data rate systems, comprising:

receiving a plurality of data bits associated with the AMR speech coder (figure 3, reference 50) (figure 5, reference step 102, col. 10 lines 16-20);

generating a plurality of frame quality indicator bits (figure 3, reference 56) for the plurality of data bits (figure 6, reference step 126, col. 11 lines 10-13);

forming a formatted frame (figure 4, col. 10 lines 4-8) having included therein the plurality of data bits and the plurality of frame quality indicator bits (figure 6, reference step 128, col. 11 lines 13-24) and conforming to a particular frame format defined by the communication system (figure 6, reference step 132, col. 11 lines 24-45); and

transmitting a representation of the formatted frame (figure 6, reference step 136, col. 11 lines 47-51).

Art Unit: 2665

For claim 2, Li discloses encoding the formatted frame with a particular encoder (figure 3, reference 62) to generate an encoded frame (figure 6, reference step 130, col. 11 lines 34-37).

For claim 3, Li discloses rate matching the encoded frame in accordance with a particular rate matching algorithm (figure 6, col. 10 line 59 to col. 11 line 53).

For claim 4, Li discloses wherein the plurality of frame quality indicator bits comprise a plurality of cyclic redundancy check (CRC) bits (col. 9 lines 28-29 and col. 11 lines 17-24).

For claim 5, Li discloses wherein the plurality of frame quality indicator bits comprise an 8-bit CRC value or a 12-bit CRC value (col. 11 lines 21-23).

For claim 6, Li discloses wherein the formatted frame is associated with one of a plurality of possible frame rates (col. 11 lines 13-24).

For claim 8, Li discloses wherein the plurality of data bits are representative of speech information (col. 10 lines 15-18).

For claim 9, Li discloses wherein the plurality of data bits are associated with one of plurality of possible data rates (col. 9 line 65 to col. 10 line 8).

For claim 10, Li discloses wherein the formatted frame for each possible data rate include a particular number of data bits, which is different from the number of data bits in formatted frames for other possible data rates (col. 11 lines 10-24).

For claim 11, Li discloses wherein the plurality of data bits includes bits from a plurality of classes, and wherein each class is associated with a respective level of importance (col. 9 line 65 to col. 10 line 8).

For claim 12, Li discloses wherein the generating and encoding are performed on the plurality of classes of bits in the formatted frame (col. 11 lines 10-24).

Art Unit: 2665

For claim 13, Li discloses wherein the plurality of classes of bits are allocated respective sections of the formatted frame (col. 11 lines 10-24).

For claim 14, Li discloses wherein the formatted frame with speech information includes at least 12 frame quality indicator bits (col. 11 lines 21-22).

For claim 22, Li discloses transmitting signaling information associated with AMR data via a signaling channel (col. 14 lines 60-62).

For claim 23, Li discloses transmitting signaling information associated with AMR data in a signaling frame on a traffic channel used to transmit the formatted frame (col. 14 lines 60-63).

For claim 31, Li discloses subsequent frame variable data rate indication method for various variable data rate systems, comprising:

a frame quality generator (figure 3, reference 56) configured to process a plurality of data bits associated with the AMR speech coder (figure 3, reference 50) to generate a plurality of frame quality indicator bits (figure 6, reference step 126, col. 11 lines 10-13);

a frame formatter (figure 3, reference 58) coupled to the frame quality generator (figure 3, reference 56) and configured to form a formatted frame having included therein the plurality of data bits and plurality of frame quality indicator bits (figure 6, reference step 128, col. 11 lines 13-24) and conforming to a particular frame format defined by the communication system (figure 6, reference step 132, col. 11 lines 24-45); and

a transmitter unit (figures 1 and 2, references 10 and 30, col. 6 lines 62-67) configured to transmit a representation of the formatted frame (figure 6, reference step 136, col. 11 lines 47-51).

Art Unit: 2665

For claim 32, Li discloses a convolutional encoder coupled to the frame formatter and configured to encode the formatted frame to generate an encoded frame (figure 3, reference 62, col. 9 lines 28-31 and col. 11 lines 10-37)

For claim 40, Li discloses wherein the particular encoder is a convolutional encoder (figure 3, reference 62, col. 9 lines 30-31).

For claim 41, Li discloses wherein the formatted frame includes a plurality of tail bits used to set the convolutional encoder to a known state at the start of each frame (col. 11 lines 13-15).

For claim 42, Li discloses omitting, from the formatted frame, format bits indicative of a particular data rate of the speech information included in the formatted frame (col. 11 lines 13-24).

For claim 43, Li discloses omitting the formatted frame signaling information associated with AMR data col. 14 lines 60-63).

3. Claims 25-29 and 33-35, are rejected under 35 U.S.C. 102(e) as being anticipated by Czaja et al (US 6,424,631).

For claim 25, Czaja et al disclose apparatus and methods for determining rate of transmitted variable rate data, comprising:

receiving a frame having included therein a plurality of data bits associated with the AMR speech coder (figure 1A, reference 104) (figure 4, reference step 302, col. 9 lines 1-2);

detecting a frame rate of the received frame (figure 1B, reference 208, col. 7 lines 27-29);
and

Art Unit: 2665

extracting the plurality of data bits from the received frame based at least in part on the detected frame rate (figure 4, reference step 310, col. 9 lines 15-17).

For claim 26, Czaja et al disclose decoding the received frame in accordance with a plurality of rate hypotheses to generate a plurality of decoded frames (col. 9 lines 1-15 and col. 9 lines 26-33).

For claim 27, Czaja et al disclose wherein the frame rate of the received frame is detected based on results of a CRC check on the plurality of decoded frames (col. 9 lines 18-23).

For claim 28, Czaja et al disclose wherein the frame rate of the received frame is further detected based on symbol error rates for the plurality of decoded frames (col. 2 lines 42-47).

For claim 29, Czaja et al disclose wherein the received frame is associated with one of a plurality of possible frame rates (col. 6 lines 3-6), and wherein the detecting is performed in accordance with a rate detection algorithm (RDA) (col. 7 line 45 to col. 8 line 64).

For claim 33, Czaja et al disclose apparatus and methods for determining rate of transmitted variable rate data, comprising:

a decoder (figure 1B, reference 210) configured to receive a frame having included therein a plurality of data bits associated with the AMR speech coder (figure 1A, reference 104) (figure 4, reference step 302, col. 9 lines 1-4), decode the received frame in accordance with a plurality of rate hypotheses (figure 4, reference steps 306-310, col. 9 lines 7-17), and provide a plurality of decoded frames for the plurality of rate hypotheses (figure 5, reference steps 404, col. 9 lines 36-43 and col. 10 lines 33), wherein each rate hypothesis correspond to one of plurality of possible frame rates for the received frame (figure 5, reference steps 404, col. 9 lines 36-43 and col. 10 lines 33); and

Art Unit: 2665

a rate detector (figure 1B, reference 208) coupled to the decoder (figure 1B, reference 210) and configured to received at least one set of quality indicator values (figure 4, reference step 312, col. 9 lines 18-26), determine a particular frame rate for the received frame based on the at least one set of quality indicator values (figure 4, reference 306, col. 9 lines 7-26), and extract the plurality of data bits from the received frame base at least in part on the determined frame rate (figure 4, reference step 310, col. 9 lines 14-17).

For claim 34, Czaja et al disclose wherein the rate detector includes a CRC checker configured to check the plurality of decoded frames based on a set of CRC bits included each decoded frame, and to provide a plurality of check bits indicative of results of the CRC check for the plurality of decoded frames (col. 9 lines 18-26).

For claim 35, Czaja et al disclose wherein the rate detector includes a symbol error rates (SER) detector configured to provide a plurality of SER values for the plurality of decoded frames (col. 2 lines 42-47).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 2665

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (US 6,141,353) in view of Bruhn (US 6,347,081).

For claim 7 and 15-20, Li discloses wherein the plurality of possible frame rates include four frame rates used for speech information (col. 10 lines 4-8) and one frame rate used for blank frame (col. 15 lines 48-50). However, Li does not disclose one frame rate used for a silence descriptor (SID) and one frame rate used for blank frame. In an analogous art, Bruhn discloses one frame rate used for a silence descriptor (SID) (col. 5 lines 63-64). Bruhn discloses wherein the plurality of data bits are representative of silence descriptor (SID) (col. 5 lines 63-64 as set forth in claim 15); wherein the SID is one of a plurality of SID types (figure 4, references 62, 64 and 66, col. 6 lines 9-35 as set forth in claim 16); wherein the SID for each SID type includes a particular number of bits that is different from the SIDs for other SID types (figure 4, references 62, 64 and 66, col. 6 lines 9-35 as set forth in claim 17); appending, in the formatted frame, one or more format bits indicative of a particular SID type of the SID included in the formatted frame (col. 3 line 66 to col. 4 line 19 as set forth in claim 18); wherein formatted frames for the plurality of SID types have same frame length (col. 1 lines 48-51 as set forth in claim 19); wherein the frame length for the plurality of SID types is 43 bits or 46 bits (col. 1 lines 48-51 as set forth in claim 20).

One skilled in the art would have recognized the plurality of data bits are representative of silence descriptor (SID) to use the teachings of Bruhn in the system of Li. Therefore, it would

Art Unit: 2665

have been obvious to one of ordinary skill in the art at the time of the invention, to use the plurality of data bits are representative of silence descriptor (SID) as taught by Bruhn in Li's system with the motivation being include implementations wherein a discontinuous transmission handler is located for example, close to the speech encoder and a transmission radio system (RSS) is located close to a channel encoder and radio transmitter (col. 5 lines 50-54).

7. Claims 24, 38 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (US 6,141,353) in view of Kamel et al (US 6,697,343).

For claim 24, Li does not disclose wherein the wireless communication system conform to the cdma2000 standard. In an analogous art, Kamel et al disclose wherein the wireless communication system conform to the cdma2000 standard (col. 2 lines 56-57).

One skilled in the art would have recognized wherein the wireless communication system conform to the cdma2000 standard to use the teachings of Kamel et al in the system of Li. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the wherein the wireless communication system conform to the cdma2000 standard as taught by Kamel et al in Li's system with the motivation being to determine the vocoding rate within the first sixteenth of a frame because power control in CDMA 2000 should be capable of power control adjustment for every one-sixteenth of a frame on the forward link (col. 7 lines 6-10).

For claim 38, Li discloses subsequent frame variable data rate indication method for various variable data rate systems, comprising:

encoding bits of the AMR speech coder information using a cyclic redundancy check (CRC) (figure 3, reference 56, col. 9 lines 28-29);

Art Unit: 2665

inserting the ARM speech coder information into a frame having a frame rate selected from a particular number of possible frame rates (figure 4, col. 10 lines 4-8 and figure 6, reference steps 126-132, col. 11 lines 10-45); and

transmitting a representation of frame (figure 6, reference step 136, col. 11 lines 47-51).

However, Li does not disclose a cdma2000 frame. In an analogous art, Kamel et al disclose a cdma2000 frame (figure 3, reference step 18, col. 7 lines 6-10). One skilled in the art would have recognized a cdma2000 frame to use the teachings of Kamel et al in the system of Li. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the cdma2000 frame as taught by Kamel et al in Li's system with the motivation being to provide cdma2000 applications, a power control group (PGG) is one-sixteenth of a frame duration (col. 2 lines 56-57).

For claim 44, Li discloses encoding the AMR speech coder information according to a tail-off convolutional code (col. 11 lines 13-15 and col. 11 lines 34-37).

For claims 45-46, Li discloses wherein the bits of the ARM speech coder information fall into a particular number of priority classes corresponding to different levels of importance (col. 9 line 65 to col. 10 line 8).

For claim 47, Li discloses wherein the particular number of possible frame rates is six (col. 10 lines 4-8).

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (US 6,424,631) in view of Bruhn (US 6,347,081) further in view of Li (US 6,141,353).

For claim 30, Czaja et al disclose wherein the plurality of possible frame rates include four frame rates used for speech information (col. 9 lines 1-4).

Art Unit: 2665

However, Czaja et al do not disclose one frame rate used for a silence descriptor (SID) and one frame rate used for blank frame. In an analogous art, Bruhn discloses one frame rate used for a silence descriptor (SID) (col. 5 lines 63-64).

One skilled in the art would have recognized the plurality of data bits are representative of silence descriptor (SID) to use the teachings of Bruhn in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the plurality of data bits are representative of silence descriptor (SID) as taught by Bruhn in Czaja et al' system with the motivation being include implementations wherein a discontinuous transmission handler is located for example, close to the speech encoder and a transmission radio system (RSS) is located close to a channel encoder and radio transmitter (col. 5 lines 50-54).

Czaja et al in view of Bruhn do not disclose one frame rate used for blank frame. In an analogous art, Li discloses one frame rate used for blank frame (col. 15 lines 48-50).

One skilled in the art would have recognized one frame rate used for blank frame to use the teachings of Li in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the one frame rate used for blank frame as taught by Li in Czaja et al's system with the motivation being to provide the first frame speech encoding data rate is not required to be determined (col. 15 lines 48-49).

9. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (US 6,424,631) in view of Rick et al (US 6,370,672).

For claims 36-37, Czaja et al do not disclose a Yamamoto detector configured to provide a plurality of Yamamoto values for the plurality of decoded frames. In an analogous art, Rick et al disclose a Yamamoto detector configured to provide a plurality of Yamamoto values for the

Art Unit: 2665

plurality of decoded frames (col. 1 line 34). Rick et al disclose wherein the frame rate of the received frame is determined based on results of CRC check, symbol error rates, Yamamoto values, or a combination thereof, obtained for the plurality of decoded frames (col. 1 lines 29-34 as set forth in claim 37).

One skilled in the art would have recognized a Yamamoto detector to use the teachings of Rick et al in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the Yamamoto detector as taught by Rick et al in Czaja et al's system with the motivation being to provide some conventional methods of determining what the received data rate is based on the received data involve the determination of whether various measures exceed a certain threshold (col. 1 lines 29-32).

10. Claims 39 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (US 6,424,631) in view of Kamel et al (US 6,697,343).

For claim 39, Czaja et al disclose apparatus and methods for determining rate of transmitted variable rate data, comprising:

performing rate detection on a received frame to determine a frame rate of the received frame (figure 1B, reference 208, col. 7 lines 27-29); and

extracting a plurality of AMR information bits from the received frame based at least in part on the determined frame rate of the received frame (figure 4, reference step 14-17).

However, Czaja et al does not disclose a cdma2000 frame. In an analogous art, Kamel et al disclose a cdma2000 frame (figure 3, reference step 18, col. 7 lines 6-10). One skilled in the art would have recognized a cdma2000 frame to use the teachings of Kamel et al in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

Art Unit: 2665

the invention, to use the cdma2000 frame as taught by Kamel et al in Czaja et al's system with the motivation being to provide cdma2000 applications, a power control group (PGG) is one-sixteenth of a frame duration (col. 2 lines 56-57).

For claim 53, Czaja et al disclose selecting a frame rate for the received frame from among a particular number of possible frames rates based on blind rate determination algorithm (col. 9 lines 1-8).

For claim 54, Czaja et al disclose wherein the particular number of possible frame rates is six (col. 6 lines 3-6).

11. Claims 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (US 6,141,353) in view of Kamel et al (US 6,697,343) further in view of Bruhn (US 6,347,081).

For claims 48-50, Li discloses wherein the six possible frame rates include four frame rates used for speech information (figure 6, reference steps 126 and 132, col. 11 lines 10-45) and one frame rate used for blank frame (col. 15 lines 48-50). However, Li in view of Kamel et al does not disclose one frame rate used for a silence descriptor (SID). In an analogous art, Bruhn discloses one frame rate used for a silence descriptor (SID) (col. 5 lines 63-64). Bruhn discloses wherein a frame carrying SID data includes 43 total bits (col. 1 lines 48-51 as set forth in claim 50).

One skilled in the art would have recognized the plurality of data bits are representative of silence descriptor (SID) to use the teachings of Bruhn in the system of Li. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the plurality of data bits are representative of silence descriptor (SID) as taught by Bruhn in Li's system with the motivation being include implementations wherein a discontinuous transmission

Art Unit: 2665

handler is located for example, close to the speech encoder and a transmission radio system (RSS) is located close to a channel encoder and radio transmitter (col. 5 lines 50-54).

12. Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (US 6,141,353) in view of Kamel et al (US 6,697,343) further in view of Lee et al (US 6,490,268).

For claims 51-52, Li in view of Kamel et al does not disclose sending signaling information on a cdma2000 dedicated control channel (DCCH) channel. In an analogous art, Lee et al disclose sending signaling information on a cdma2000 dedicated control channel (DCCH) channel (col. 8 lines 10-14). Lee et al disclose sending signaling information using blank- and – burst frames on a cdma2000 fundamental channel (col. 9 lines 7-12 as set forth in claim 52).

One skilled in the art would have recognized a cdma2000 dedicated control channel (DCCH) channel to use the teachings of Lee et al in the system of Li. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the cdma2000 dedicated control channel (DCCH) channel as taught by Lee et al in Li's system with the motivation being to provide the CDMA-2000 standard in a message transmitted to or received from a BS (col. 8 lines 10-14).

13. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (US 6,424,631) in view of Kamel et al (US 6,697,343) and Bruhn (US 6,347,081) further in view of Li (US 6,141,353).

For claim 55, Czaja et al disclose wherein the plurality of possible frame rates include four frame rates used for speech information (col. 9 lines 1-4).

However, Czaja et al in view of Kamel et al do not disclose one frame rate used for a silence descriptor (SID) and one frame rate used for blank frame. In an analogous art, Bruhn

Art Unit: 2665

discloses one frame rate used for a silence descriptor (SID) (col. 5 lines 63-64). One skilled in the art would have recognized the plurality of data bits are representative of silence descriptor (SID) to use the teachings of Bruhn in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the plurality of data bits are representative of silence descriptor (SID) as taught by Bruhn in Czaja et al' system with the motivation being include implementations wherein a discontinuous transmission handler is located for example, close to the speech encoder and a transmission radio system (RSS) is located close to a channel encoder and radio transmitter (col. 5 lines 50-54).

Czaja et al in view of Kamel et al and Bruhn do not disclose one frame rate used for blank frame. In an analogous art, Li discloses one frame rate used for blank frame (col. 15 lines 48-50). One skilled in the art would have recognized one frame rate used for blank frame to use the teachings of Li in the system of Czaja et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the one frame rate used for blank frame as taught by Li in Czaja et al's system with the motivation being to provide the first frame speech encoding data rate is not required to be determined (col. 15 lines 48-49).

14. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja et al (US 6,424,631) in view of Kamel et al (US 6,697,343) further in view of Lee et al (US 6,490,268).

For claims 56-57, Czaja et al in view of Kamel et al does not disclose receiving on a cdma2000 dedicated control channel (DCCH) channel signaling information associated with a traffic channel carrying the AMR speech coder information.

Art Unit: 2665

In an analogous art, Lee et al disclose receiving on a cdma2000 dedicated control channel (DCCH) channel signaling information associated with a traffic channel carrying the AMR speech coder information (col. 8 lines 10-14). Lee et al disclose receiving signaling information associated with a fundamental channel carrying the AMR speech coder information within blank and burst frames received in the fundamental channel (col. 9 lines 7-12 as set forth in claim 57).

One skilled in the art would have recognized a cdma2000 dedicated control channel (DCCH) channel to use the teachings of Lee et al in the system of Li. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the cdma2000 dedicated control channel (DCCH) channel as taught by Lee et al in Li's system with the motivation being to provide the CDMA-2000 standard in a message transmitted to or received from a BS (col. 8 lines 10-14).

Allowable Subject Matter

15. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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